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ABSTRACT

In an attempt to provide low cost enrichment to gifted/talented students with limited English proficiency, 11 preservice teachers served as mentors for 20 students in grades 6 to 7. Students had learned English as a second language in the primary grades. A four phase enrichment model was implemented: (1) mentor drafts proposed enrichment project before meeting students; (2) mentor and students agree on actual project to be done; (3) performance of the agreed upon project; and (4) completion and presentation of the project. (Sample records of learning activities in each phase are provided.) Evaluation of the project was completed via questionnaires (samples included), and needs were identified, including increased student participation in planning projects and the addition of training for the mentors on working with Oriental students speaking English as a second language. (CL)

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Report No. 82:17

UTILIZING PRESERVICE TEACHERS AS MENTORS TO PROVIDE
ENRICHMENT EXPERIENCES FOR GIFTED/TALENTED ESL PUPILS

Dr. William A. Gray

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and Marilynne E. Gray

PROJECT DIRECTOR: Dr. William A. Gray
(if different
from author)

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Utilizing Preservice Teachers As Mentors To Provide Enrichment
Experiences For Gifted/Talented ESL Pupils

by

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And

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University of British Columbia

During the 1981-82 school year, 11 preservice teachers from the first author's educational psychology course earned course credit for serving as mentors for 20 grade 6 or 7 gifted/talented (G/T) pupils from Doug Hill's enrichment program at Strathcona Elementary School in Vancouver. Most of these pupils had previously learned English as a second language in the primary grades such that they now demonstrated sufficient English facility as well as the kind of intellectual ability and motivational commitment needed to be able to do a "Mentor-Assisted Enrichment Project" (MAEP) with an English-speaking mentor .

This report will present the "Four-Phase Enrichment Model" utilized by the mentors while working with these G/T ESL pupils , along with mentors' recommendations for revising this model for more effective use with ESL pupils . (This model had been previously developed and tested with 59 grade 6 and 7 Anglophone pupils over the previous three years. See Gray and Rogers, 1982, and Gray, 1982, for a description of the development of this model and pupil benefits gained from its utilization.)

Questionnaire and interview responses obtained from mentors and their pupils will be presented and briefly discussed to indicate benefits gained from doing a MAEP. Then, based on these findings, future plans will be described. Finally, important cautions and recommendations will be presented to indicate necessary support required for MAEPs to be implemented successfully.

Figure 1. A Four-Phase Enrichment Model With A Summary of Mentors' Comments Regarding Its Applicability For Gifted/Talented ESL Pupils

Phase 1: MENTOR DRAFTS PROPOSED ENRICHMENT PROJECT BEFORE MEETING STUDENTS

Step 1: Mentor identifies a topic or an area of personal expertise (e.g., hobby, work experience, university major)	
Special Hints for Succeeding	Mentor Comments
A. Topic should be broad enough to get material on it yet limited enough to be completed in the time span available. B. The topic should be of interest to the age level of the students for whom you will be the mentor. C. Be enthusiastic about the topic in order to motivate student interest. Do not assume all students are intrinsically motivated.	A. Mentors endorsed this hint. B. As above with additional comment that mentors should be able to incorporate active and varied learning experiences into the project. C. Mentors felt this was very important to keep in mind.
Step 2: Mentor writes up a proposed sequence (schedule) of actively-involving learning experiences that will enable students to gain new knowledge, skills and sensitivities from an in-depth study of the topic, culminating in the completion of a project product and a class presentation of this. The purpose of this proposal is to match mentors to pupils who are interested in this same topic.	
Special Hints for Succeeding	Mentor Comments
A. Active learning experiences (e.g., field trips, interviewing someone, making something) heighten & sustain students' interest. B. There will be times when mentors will have to provide informational input. Do this using not only verbal explanation, but also visual aids (movies, filmstrips, concrete models, pictures, etc.). C. Be able to communicate to your students why each learning experience is important in terms of how it leads to the next experience and how it promotes specified learning outcomes. D. The completion of a final project product gives the students a feeling of accomplishment, and it can be shared with (presented to) classmates to benefit them in turn.	A. Mentors endorsed this hint, emphasizing the need to (a) design each activity to relate to the final project presentation; (b) provide several alternatives for the students to choose from; (c) leave time for student feedback; and (d) pay attention to desirable student characteristics as noted on the mentor proposal (e.g., for a project on computers, the students will need to be at a certain level in mathematics or in art, the students ideally should have a creative bent.) B. Mentors agreed with this and cautioned that sometimes such visual aids are not available when they are needed so advance planning should be done to have alternatives. C. Mentors agreed with this noting that if the project is logically-sequenced at the outset then learning experiences will link one with another. D. Mentors endorsed this hint.

Phase II: MENTOR AND STUDENTS AGREE ON ACTUAL PROJECT TO BE DONE

Step 3: Mentor and interested students discuss the proposed enrichment project as a take-off point for agreeing on the actual project to be done.

Special Hints for Succeeding	Mentor Comments
A. Ask questions related to your proposal and then listen to the students' needs and interests because it is the students who ultimately will do the project, and they will do it more willingly if they have had a voice in deciding what will be done, when, etc. Do not just talk the students into doing your project, for it must be their project as well if motivation is to be maintained for doing it. B. Emphasize special aspects of your proposed project, especially out-of-class activities and meeting people in the community. C. Do not over burden students with unnecessary homework. Many "gifted" students are already doing numerous extra-curricular activities. Plan the schedule so that most things can be done when you can provide the necessary help and guidance.	A. Mentors felt this is critical because this is the point at which communication is established. At the start of the project, it is helpful to have 2 or 3 very specific suggestions as students are thinking about a topic which may be new to them; thus, they will not have many ideas or experiences to draw on. Deciding what they want to do can be a difficult experience especially for shy students. B. Mentors agreed with this hint. C. As above comment.

Step 4: Jointly agree upon the actual project to be done and revise the schedule of learning activities and outcomes accordingly. Specify due dates for completion of special assignments.

A. Agree upon responsibilities that each will assume. If you work with more than one student, it is imperative that each pupil takes on well-defined roles /responsibilities that are important to carrying out the overall project and completing a final product. B. Agree to periodically review the scheduled learning activities to take into account illness and other setbacks and to include new learning experiences. Then, revise the schedule in writing so everyone has a record of the changes in responsibilities/dates/etc. C. Get a commitment from students to do what's been agreed upon, including necessary homework, in accordance with scheduled due dates.	A. Mentors felt it might be useful to have written contracts in some instances, a listing of goals at the start of each meeting, and a clear understanding of meeting times/places/activities. B. Mentors agreed that flexibility was essential. This was also seen as an opportunity to incorporate student suggestions into the project in a well-defined manner. C. Mentors agreed with this hint and suggested writing the homework down also helps.
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Phase III: DOING THE AGREED-UPON PROJECT

Step 3: Prepare exciting/novel materials and experiences before each meeting with students to prevent loss of interest.	
Special Hints for Succeeding	Mentor Comments
A. Obtain parent permission (on consent forms) & make necessary arrangements well before out-of-school activities are to take place. B. Do not assume that the classroom teacher/school already has whatever materials/resources you need. Check beforehand.	A. Mentors endorsed this hint. Some mentors suggested a checklist could help students to prepare. A clear outline of expectations helps (e.g., behavior). A phone call to students the night before is useful to make sure everything is in order. B. Mentors endorsed this hint.
Step 6: Provide active learning experiences whenever possible, which: (a) have a perceivable purpose in themselves; and (b) lead to completion of a presentable project product.	
Special Hints for Succeeding	Mentor Comments
A. At the start of each meeting, briefly review what has been done to date as a lead-in to what is being done at this meeting. B. Weekly learning experiences should not be just "busy work". They must be directly related to the topic & to the final product (e.g., the results of several interviews or visits might be summarized and compared in some meaningful way). C. Do not do for the students what they can do for themselves. Nevertheless, it is important to provide informational (instructional) input when necessary so that they learn new skills and/or concepts needed for doing active learning experiences. D. Be certain students understand and accept the purpose for doing each activity (to maintain motivation).	A. Mentors agreed with this hint. Mentors thought this should be done as soon as possible after the previous event. If more than one student is involved, this is an opportunity to compare/contrast/combine impressions. B. Mentors agreed and suggested that this was the time to provide an example or sample to get students started. C. Mentors supported this idea. D. Mentors supported this idea.
Step 7: Prepare the students for subsequent learning experiences (meetings). These should be so structured that they are directly related to the overall project plan & proposed project product.	
Special Hints for Succeeding	Mentor Comments
A. The week before each meeting, discuss with students what activity is scheduled and what responsibilities everyone has and why (i.e., how the activity fits into the overall project and will lead to the completion of the project product). This will enable students to understand and do what has been planned (including homework assignments). B. Do not assume such things as: students can design their own questionnaire to use for next week's out-of-class interview. Explain and show them how to do these things. C. Phone the students 1-2 days before regularly scheduled meetings to find out if necessary homework assignments have been done, if your help is needed, etc.	A. Mentors concurred with this hint. B. Mentors emphasized the importance of not assuming too much with bright/talented/gifted students. C. Mentors agreed with some mentioning that pupils should learn how to contact mentors. This would provide not only the experience but also the sense of responsibility for the work.

Phase IV: FINISHING AND PRESENTING THE PROJECT

Step 8: Help students organize whatever materials will be used in the class presentation of the project product.	
Special Hints for Succeeding	Mentor Comments
A. Provide assistance where necessary, always remembering that IT IS THE STUDENTS' PROJECT -- you are the mentor. B. Emphasize neatness and the use of colourful materials because these attract audience attention during the class presentation. NOTE: These materials (e.g., posters, photos, slides, pictures, reports, charts, models, graphs, etc.) should have been prepared throughout the project such that they can be "finished off" (if necessary) & organized into a coherent project product that reflects what was done/learned during the project.	A. Mentors agreed with this. B. Mentors regarded this as very important. Some students might have difficulty in taking interesting photos of places visited (etc.) but mentors felt students certainly could provide the commentary. Activity during the presentation and audience participation were also mentioned as factors to consider.
Step 9: Practice (rehearse) the class presentation of the project.	
Special Hints for Succeeding	Mentor Comments
A. Let students present the project to you (pretend you are the class and ask questions where appropriate to get students used to answering). Emphasize the proper use of visual aids in the presentation and clear/loud voice projection. B. Use a tape recorder so students can hear themselves presenting. Better yet, use videotape playback unit. C. Time the various parts of the presentation emphasizing smooth and proper pacing. NOTE: You might need to demonstrate (model) how to give an interesting presentation which smoothly incorporates the various materials/visuals that will be used.	A. Mentors agreed with this. Mentors felt it is useful to have presentations given to small groups prior to a whole-class presentation. B. Mentors endorsed this hint. C. Mentors agreed with this.
Step 10: Next week, students present the completed project to their classmates.	

1. Implementing MAEPs With G/T ESL Pupils

Except in two instances, mentors worked with pupils in pairs so that pupils would have the support of a partner with whom they could discuss places they had visited on fieldtrips arranged by their mentor and what they were learning from each enrichment experience provided by their mentor .

Using the previously developed "Four-Phase Enrichment Model" presented in Figure 1, mentors assisted their pupils to (a) plan, (b) carry out, (c) complete, and (d) present an enrichment project to their classmates so that they also might benefit from what was done and learned. See Figure 1 for a summary of mentor's comments about this model's applicability to G/T ESL pupils .

Insert Figure 1 About Here

Unlike tutors or teachers , who primarily provide remediation or instruction in basic concepts and skills, our mentors provided enrichment by sharing their own personal expertise in a topical area with interested pupils and, in the process, challenged them to use their higher level thinking skills. In addition, our mentors made arrangements to take pupils on several fieldtrips, prepared them to interview various people in the community and workforce, and helped them to utilize community resources in ways that exceed what typical classroom teachers or enrichment teachers can readily do to assist individual pupils in carrying out highly varied enrichment projects .

In our previous research and again in this study, we found that a compatible match between mentor and pupil is essential to

the success of a MAEP. The matching process begins in Phase I when prospective mentors write up a carefully-scheduled sequence of interesting, community-based enrichment activities in an area of personal expertise. After informing the pupils of proposed topics, Doug Hill (the enrichment teacher) met with the first author to match his pupils to a preferred topic and thus to a specific mentor provided by the author. (Sometimes it was possible to reverse this procedure by finding out pupil's interests and then soliciting mentor proposals to match pupil interests.)

This Written Proposal was also important in other ways: (1) it quickly enabled mentor and pupil to agree on a Finalized Project Plan during Phase II because they had something definite to discuss; (2) it gave direction to overall project planning and execution; (3) it enabled mentor and pupil to be properly prepared before each meeting since they knew what was planned; (4) it helped to avoid last minute rushes and pressure being put on the pupil to complete a presentable end-product reflecting what was done and learned; and (5) it allowed time for rehearsing the project presentation so that it was smooth-flowing, interesting, and informative.

During Phase II, most mentors in the present study began to establish a harmonious working relationship by involving their pupils in making decisions about what they wanted to do, how, why, etc. At the first meeting with pupils, each mentor was supposed to present his/her Written Proposal without trying to impose it, and then solicit pupil input that could be incorporated into a mutually agreed upon Finalized Written Plan which everyone would commit themselves to complete. However, not all mentors followed

these guidelines, as will be discussed later. (Figures 2,3, and 4 present three Finalized Plans.)

Insert Figures 2,3, And 4 About Here

Successfully carrying out a MAEP during Phase III depended upon the following things taking place. First, mentors did not assume that just because a pupil is "gifted" he/she already knew how to do something (such as how to prepare good interview questions) or already understood important new complex concepts. Instead, mentors asked appropriate questions in order to diagnose specific instructional input they must provide. This procedure enabled pupils to complete related homework assignments so that they were prepared for the next scheduled activity.

Second, mentors periodically reviewed with their pupils what had been done and learned in order to help pupils consolidate new learnings and incorporate them into a presentable end-product.

Third, visual evidence of what was done and learned was obtained/made each week (in the form of models, photos, slides, charts, posters, etc.) so that these materials could easily be assembled at the end of the project for use in the class presentation.

Fourth, mentors ascertained if pupil interest was waning or had turned in an unexpected direction, and, if so, then rewrote the remaining schedule of activities into a revised plan.

Fifth, mentors telephoned their pupils at home a night or two before the next meeting to assure that their pupils would be prepared and able to meet.

Throughout Phase III, mentors turned in weekly Mentor Reports

Figure 2. A FINALIZED PLAN AGREED UPON BY MENTOR AND STUDENT(S) FOR A COMMUNITY BASED "MENTOR-ASSISTED ENRICHMENT PROJECT"

MENTOR: Nadine STUDENT(S): Anne Lillian
SCHOOL: Strathcona PROJECT TOPIC: Silver Smithing

WEEK	LEARNING ACTIVITY (INCLUDING RESOURCES)	OUTCOME-RELATED LEARNING
#1	1. Meet students, present topic and proposal. 2. Discuss project options. Select two. 3. Set goals for the project. 4. Establish mentor's contract. Student one for homework	1. Stimulate intrinsic motivation. 2. Discussion skills. 3. Set realistic goals. 4. Accept responsibility for own action. Work independently.
#2	1. Complete contract. 2. Provide 1st set of equipment, work area. 3. Demonstrate use of tools, scribing, sawing and filing. 4. Work on copper piece. 5. Discuss design principles. Do comparative exercise. 6. Prepare and practice questions for jeweler.	1. Accept responsibility for own actions. 2 & 3 Knowledge of equipment and techniques. 4. Practice techniques. 5. Recognize elements of good design; comparing. 6. Question preparation, confidence
#3	1. Review progress; discuss design. 2. Rehearse questions with mentor. 3. Visit jeweler. 4. Discuss field trip, select for presentation. 5. Prepare thank you note.	1. Participation in planning. 2. Communication skills, self confidence. 3. Observation and ques. skill. 4. Decision and organizing skills. 5. Courtesy skills.
#4	1. Design 2nd project-onto silver. 2. Demonstrate cabochon stone setting and bezel. 3. Demonstrate soldering. 4. Make bezel and solder to design. 5. Discuss tour of smelting company.	1. Demonstrate own design style. 2. Knowledge of techniques. 3. " " " " 4. Safety habits. 5. Practice techniques. 6. Prepare for tour.
#5	1. Tour Delta Smelting Company. 2. Compile information from tour. 3. Prepare thank you note. 4. Discuss problem with work area - solve. 5. Work on silver piece.	1. Observation and question skills 2. Organization skills. 3. Courtesy skills. 4. Problem solving skills. 5. Practice techniques.
#6	1. Work on project. Students teach each other. 2. Organize outline for class presentation.	1. Speed and accuracy; work independently and at own rate; share knowledge. 2. Decision making and organization skills.
#7	1. Demonstrate hand and machine polishing. 2. Practice polishing. 3. Finish silver pieces. 4. Prepare posters for presentation. 5. Rehearse mock demonstration and presentation.	1. Knowledge of techniques. 2. Practice skills. 3. Completion of a project. 4. Organization, art work. 5. Speaking skills, confidence.
#8	Class Presentation: 1. Demonstration of making a sterling ring. 2. Present (verbally) information and display samples.	1. Demonstrate skills. 2. Share knowledge. Speaking skills.

Figure 3. A FINALIZED ENRICHMENT PROJECT PLAN AGREED UPON BY MENTOR AND STUDENTS FOR A COMMUNITY-BASED "MENTOR-ASSISTED ENRICHMENT PROJECT"

MENTOR: Hopland STUDENTS: Josh and Steven
 School: Strathcona PROJECT TOPIC: A Survey of Computers

WEEK	LEARNING ACTIVITY (INCLUDING RESOURCE PEOPLE & MATERIALS)	OUTCOME RELATED LEARNING
1	Discussed mentor's proposal and agreed upon this. Finalized Enrichment Project Plan	- provoked interest
2	Visited UBC computer facilities to see various kinds of terminals, etc.	- recognised 'systems nature' of computers
3	Visited Radio Shack Microcomputer Centre Talked to professional programmer and sales staff (questioned their roles) Played computer games	- recognised that micros are just as functional as mainframes except for size - pupils' programming knowledge tested (sample problems asked)
4	Visited UBC's Educational Research Service Centre and tried their APPLE II and CORVUS systems Ran canned programs Used graphics tablet	- distinguished various systems and CORVUS vs MTS - used DISKETTES to save load programs - planned 'BLOCK' diagram for class presentation
5	Ran canned programs on MTS/Amdahl Ran BASIC on terminals Did editing of files, set up a file	- compared language used on "Big and small" machines - tried BASIL on Amdahl
6	Visited McRoberts Jr. Secondary School's mini-computer. (HP 2000) Tried "hard copy" terminals Got a listing of a game Wrote statements on mark sense cards	- Questioning improved because of prepared questions - Asked computer operator about management of mini-computer facilities
7	Ran batch of punched cards at UBC Visited areas where computers might be used Tried LOGO programming language	- Fun day! - Discovered applications of computers in ast.onomy, TELIDON and mathematics
8	Visited TRIUMF mesa research facility; saw over 200 micro-processors/computers Talked to technicians who program the micros	- looked for 'hidden' uses of microprocessors - more examples of input/output devices were categorized
9	Prepared and rehearsed class presentation of completed project, using borrowed component boards, chips, etc., several audiovisual aids/posters, hands-on items	- gained confidence in skills - public speaking skills
10	Pupils presented their Mentor-Assisted Enrichment Projects (MAEPs) to classmates	- discerned level of audience - developed public speaking skills

Figure 4: A FINALIZED PLAN AGREED UPON BY MENTOR AND STUDENT(S) FOR A
COMMUNITY BASED "MENTOR-ASSISTED ENRICHMENT PROJECT"

MENTOR: Don STUDENT(s): Rose Kathleen
SCHOOL: Strathcona PROJECT TOPIC: Horses in Today's World

WEEK	LEARNING ACTIVITY (INCLUDING RESOURCES)	OUTCOME-RELATED LEARNING
#1	1. Introduce proposal and topic. 2. Start to develop relationships with Rose & Kathleen 3. Listen to the girls' suggestions for activities. 4. Agree on a finalized plan.	1. Get to know the girls and have them get to know me. 2. Develop a plan of activities, which suited the girls and myself 3. Motivate the girls' interest in the subject.
#2	1. Visit our mare Wimpkish in Richmond. 2. Interview Maria Froese about grooming, feeding, tack, and care of horses. 3. Given a grooming demonstration in which the girls actually groomed the horse.	1. Get to know some basics about horses. 2. Learn how to act around horses. 3. Learn about the horses role as a show-animal and what is involved in keeping.
#3	1. Visit a small breeding farm in Surrey. 2. Interview Kathy Gibson about horse breeding, racing and showing. 3. Compare thoroughbreds, quarter-horses, and palamios, and learn their different uses.	1. Learn the different breeds of horses. 2. Learn what is involved in breeding, racing, and showing these horses.
#4	1. Go to Southlands to take pictures of different types of horses. 2. Visit several horse farms and the managers 3. Visit Southlands Riding Club and look at show-courses.	1. Gather slides for finished pres. 2. See horses in different uses. 3. Get a first hand view of what a large show-circuit is like.
#5	1. Interview boarding-stable owner, Carolyn Smith, about benefits and problems of keeping horses. 2. Visit the boarding stables 3. Observe Wimpkish a few days before she drops her foal.	1. Learn what is involved in keeping horses and managing a stable. 2. See what a very pregnant mare is like and learn how to tell when the foal is about to be born.
#6	1. Go to Richmond and (hopefully) see a foal which is only a few days old. 2. Take pictures of the mare and foal to put into the presentation.	1. Learn about foals and foaling. 2. Collect material for presentation
#7	1. Organize slides, samples, and materials for finished presentation. 2. Go over notes and put together an interesting talk.	1. Learn how to organize material in an interesting presentable way 2. Teamwork and cooperation.
#8	1. Rehearse presentation and instruct students on delivery of their talk	1. Learn and develop skills for public speaking and oral present.

that indicated what had been done and learned, and was planned for the next meeting with pupils . The author graded these Mentor Reports and gave photocopies to the enrichment teacher for the following reasons: (1) to keep himself and the enrichment teacher informed; (2) to maintain the mentor's responsibility to be properly prepared for each meeting; (3) to assure that the enrichment project would be completed and presented according to schedule; and (4) to indicate the mentor's developing competency in utilizing appropriate instructional methods and learning activities to promote cognitive, affective, and social learning outcomes. (See Figure 5 for an example.)

Insert Figure 5 About Here

During Phase IV, not only did mentors and their pupils look forward to giving a well-rehearsed, interesting, and informative presentation of their project, but so did classmates and other teachers . Thus, the mentor's role during Phase IV was to help pupils organize previously-prepared visuals into a smoothly sequenced multi-media presentation, and then to provide feedback as pupils rehearsed the presentation. (All pupils completed and presented their enrichment projects with varying degrees of success, depending upon how well their mentors assisted them--as will be discussed later.)

2. Benefits From Doing MAEPs

"Mentor-Assisted Enrichment Projects" were utilized at Strathcona Elementary School because Doug Hill and the authors

Figure 5. MENTOR'S WEEKLY REPORT FOR A MENTOR-DIRECTED ENRICHMENT PROJECT

MENTOR Don STUDENTS Rose and Kathleen
 DATE March 7/82 MEETING _____ TOPIC Horses in Today's World
 STARTING TIME 11:00 a.m. FINISHING TIME 3:00 p.m.

1. (a) State what your student did today, including specific resources utilized (i.e., people, materials, community, etc.). (Worth 10 pts.)

Today the students and I went to visit a breeding farm run by Kathy Gibson. We saw three yearling fillies and learned about the differences between quarter horses and thoroughbreds. Kathy told us what the different types of horses are used for and also what is involved in breeding, showing and racing horses. Resources involved included Kathy Gibson, and 3 horses: Pumpkin, Shady and Honey.

- (b) State how (a) is related to the final Enrichment Project product that your student will present to classmates. (Worth 10 pts.)

The students explain to their classmates ways of telling a quarter horse from a thoroughbred. They can tell their audience what these horses are used for and what different classes of showing and racing they can be entered in. The students can also tell about horse breeding. Samples of feeds and grains were also collected.

2. (a) Describe one higher level thinking skill (based on Bloom's taxonomy) your student learned/demonstrated today. How is this skill important for doing this Enrichment Project? (Worth 5 pts.)

Today the students demonstrated application of information. They were able to use the knowledge they had obtained about characteristics of different types of horses to come up with the conclusion that quarter-horses would be good for harding cattle and thoroughbreds good for racing. This is important in understanding why different horses are used for different things.

- (b) Describe one social skill, or affective learning outcome based on Krathwohl's taxonomy, that your student learned/demonstrated today. How is this important for doing this Enrichment Project? (Worth 5 pts.)

The students showed that they valued horses as something worthwhile to study. The girls seemed to value the horses as exciting and interesting animals. They also seemed to value all the information and knowledge Kathy could give them. This is important because the outcome of the project depends on the value which is put on horses.

3. Describe specific instructional methods you utilized today. How effectively? (Worth 10 pts.)

Kathy talked to the students and told them a lot about horses and breeding. She also brought out a thoroughbred and a quarter horse together to actually show the differences between them. The girls were quite shy, so I suggested questions for them to ask Kathy, who was more than willing to answer them. These methods worked very successfully

OVER →

Figure 5 continued

2.

4. Answer either (a) or (b) as appropriate. (Worth 10 pts.)

- (a) If your student was self-motivated today, describe how you provided necessary direction or assistance without imposing your own ideas on your student.
- (b) If your student was not self-motivated today, describe specific motivation and/or discipline techniques you utilized today as mentioned in class or in your textbook (e.g. assertiveness reality therapy, behavior modification, etc.) How effectively?

The students were generally self-motivated today. They were very excited about seeing the fillies and they were also very interested in what Kathy had to tell them. The only difficulty was that they were too shy to ask questions. My suggesting questions for them to ask helped them to get over this shyness to some extent.

5. Describe two major things you learned from today's mentoring experience that will enable you to do a better job of being a mentor the next time you meet your student. (Worth 5 pts. each - 10 pts.)

- 1. I learned that I should try to put these students at ease when we talk with people when they don't know. This would encourage them to talk and ask more questions.
- 2. I also learned that even though the girls are still a little bit afraid of horses they are very interested in horses and want to know as much as they can about them.

6. Describe one major new thing you learned about the characteristics of gifted/talented students from today's meeting with your student. (Worth 5 pts.)

I learned that these children were very concerned about academic performance and grades. They worked very hard at taking notes and expressed their desire to present a high quality project to their peers.

7. Indicate what your student will learn and do at the next meeting, including resources to be utilized. (Worth 5 pts.)

Next meeting we will be visiting Southlands riding club. We will take pictures of horses and observe how they are kept, looked after, and put to use. Resources will be the Southlands riding club and my camera.

NOTE: Did you have any problems for which you need my assistance? (If so, explain).

believe that MAEPs provide an important, inexpensive complement to the enrichment teacher's overall enrichment program for G/T ESL pupils . Following are six major reasons for utilizing preservice teachers as mentors for G/T ESL pupils :

1. To provide an inexpensive means of of enabling G/T ESL pupils to pursue an in-depth investigation of a real problem or topic of personal interest to them, based on Renzulli's (1977) "Enrichment Triad Model" . Mentors have the time and expertise to share with individual pupils to help them plan, carry out, complete, and then present an enrichment project of some 8-10 weeks duration whereas the typical teacher is unable to provide this kind of individual assistance. (Each MAEP cost about \$20 for fieldtrips, slides, and other materials used in class presentations.)

- 2 To expand pupil's cultural awareness as a result of going on fieldtrips arranged by their mentors . This is especially beneficial for pupils such as those at Strathcona School, who tend not to venture out of the "Chinatown" community in which they live. (Indeed, we found in this study that those pupils who were reluctant to go on fieldtrips rated their completed enrichment projects and their mentors at the low end of the 5-point scale used to collect the data presented in Table II. More on this later.)

3. To develop individual pupil's language facility

further as a result of (a) rehearsing and then interviewing various people in the workforce and community, (b) discussing with their partner how those things they had done and learned would be presented to their classmates , and (c) rehearsing and giving a class presentation.

4. To foster pupil's social and emotional development by enabling them to gain confidence from interviewing strangers during fieldtrips, from giving a class presentation, and from learning how to work together cooperatively, sometimes leading and sometimes supporting their partner.

5. To provide real-life opportunities for pupils to develop and utilize the higher level thinking skills in Bloom's cognitive taxonomy while internalizing the value gained from what they experienced throughout the enrichment project , in accordance with Krathwohl's affective taxonomy of learning outcomes.

6. To enable preservice teachers to develop basic teaching skills and gain first-hand knowledge of the characteristics of G/T ESL pupils as a result of assisting them in planning, conducting, completing, and presenting an enrichment project of 8-10 weeks duration.

To find out if these beliefs were actually fulfilled in

practice, similar questionnaires were administered separately to mentors and pupils after the completed MAEPs had been presented.

Table I presents the response frequencies obtained from 11 mentors indicating the benefits they gained and the benefits they believed their G/T ESL pupils gained from doing a "Mentor-Assisted Enrichment Project". Of these 45 questions, 40 were also answered by the 20 participating ESL pupils along with 13 additional questions that were specifically indicative of how well mentors followed the "Four-Phase Enrichment Model" from the pupil's point of view. These pupil responses are presented in Table II.

Table III presents the means and standard deviations for those 40 common questions responded to by mentors and their pupils, along with f-values and 2-tail probabilities derived from t-tests calculated for the common questions. This Table shows that the mentors typically responded more positively to the questions, but on only eight questions was there a statistically significant difference between the group means for mentors and pupils.

One difference was expected--for question 16. Indeed, one of the primary reasons for providing mentors was for them to arrange and take pupils on fieldtrips so that they could interview various people in the workforce and community. In a previous study involving 31 G/T Anglophone pupils, who did both a "Mentor-Assisted Enrichment Project" and a "Self-Directed Enrichment Project" in a randomly assigned sequence, the pupils reported that they were able to utilize significantly more human and non-human community resources when working with a mentor because their young ages prevented them from doing these things on their own (see Gray, 1982). In the present study, pupils gave similar reasons

Table I. Response Frequencies Obtained from 11 Mentors Indicating the Benefits They Gained & Their Gifted/Talented ES Pupils Gained from Doing a "Mentor-Assisted Enrichment Project" (MAEP)

Response Options:

	(-1)	(-2)	(-3)	(-4)	(-5)
Not Applicable					
Definitely "NO"					
Somewhat "NO"					
Neutral					
Somewhat "YES"					
Definitely "YES"					

Response Frequencies

-	-	-	-	4	7
-	-	-	3	2	6
-	-	-	1	4	6
-	-	1	-	1	9
-	-	1	-	7	3
-	-	-	-	4	7
-	-	-	2	5	4
-	-	-	2	7	2
-	4	1	1	5	
-	-	-	-	4	7
-	-	-	-	2	9
-	-	1	-	6	4
-	-	-	-	8	3
-	-	-	3	4	4
-	2	-	-	3	6
-	-	-	1	2	8
-	-	1	2	2	6
-	-	1	2	3	5
-	-	-	3	2	6
-	-	-	1	1	9
-	-	-	-	2	9
-	-	1	3	2	5

DIRECTIONS: The Mentor-Assisted Enrichment Project, which you did was intended to benefit both the pupil(s) with whom you worked as well as yourself. In order that the nature of these projects can be improved in the future, we need your honest, objective answers to the following questions. We want to know what specific benefits you gained in relation to becoming a competent teacher. We also want to know what benefits you think your pupil gained from working with you.

Therefore, please answer all questions honestly and objectively that are applicable to you, your pupil, and the enrichment project you did together. Give specific detailed recommendations to the open-ended questions at the end.

1. Beside each question below, circle the response that best indicates the extent to which you benefited as a mentor from directing an enrichment project.

- Did you learn how to share your own area of expertise so as to interest your pupil(s) in it?
- Did you learn how to incorporate your pupil(s) interest into your area of expertise?
- Did you learn how to prepare your pupil(s) properly for each meeting?
- Did you learn how to sequentially organize learning experiences that led to a presentable end product?
- Did you learn how to provide enough direction about what to learn or look for without telling your pupil(s) what to think or do?
- Did you learn how to arrange active learning experiences for your pupil(s) to do?
- Did you learn how to build on your pupils' progress from week to week?
- Did you learn how to pose higher level questions that stimulated your pupil(s) to think about and interpret what he/she/they experienced or did?
- Did you learn when to discipline or motivate your pupil(s) to keep them on task?
- Did you learn how to employ teaching methods and experiences that were appropriate for promoting the learning that was taking place?
- Did you learn how to employ resources and materials that motivated your pupil(s) to want to learn?
- Did you learn to identify the cognitive outcome that was being promoted in each meeting?
- Did you learn how to identify the affective learning outcome that was being promoted in each meeting?
- Did you learn how to encourage your pupil(s) to develop new skills and behaviours in their own style (going beyond your model)?
- If you directed a group project, did you learn how to get group members to share responsibilities?
- Did you learn how to arrange interviews, field trips, etc. outside school?
- As a result of being a mentor,
 - have you come to realize that gifted/talented pupils need enrichment experiences to fulfill their unique potential?
 - has your understanding of gifted/talented pupils increased?
- Would you want to direct another mentor-directed enrichment project for gifted pupils?
- Were you committed to serving as a mentor in the project you directed?
- Were you committed to sharing your expertise with your pupil(s)?
- Were you harmoniously matched with a pupil or pupils who were committed to learn about your area of expertise?

Table I continued

Response Options:

	(=1)	(=2)	(=3)	(=4)	(=5)
Not Applicable					
Definitely "NO"					
Somewhat "No"					
Neutral					
Somewhat "YES"					
Definitely "YES"					

Response
Frequencies

-	-	-	-	1	10
-	-	-	-	2	9
-	-	-	-	4	7
-	-	-	-	1	10
-	-	-	-	6	5
-	3	-	1	3	2
-	10	-	-	1	-
-	1	2	6	2	-
-	-	-	2	7	2
-	-	-	1	7	3
-	1	-	-	4	6
-	-	-	-	3	8
-	-	-	-	3	8
-	-	-	-	3	8
-	-	-	2	6	3
-	1	2	2	5	1
-	-	1	5	2	3
-	-	-	3	5	3
-	-	-	5	5	1
-	-	1	1	3	6
-	1	1	1	2	6
-	-	-	1	3	7
-	-	-	1	3	7

II. Beside each question below circle the response that best indicates the extent to which you believe your pupil(s) benefited from doing the enrichment project you assisted as a mentor.

- A. Did your pupil(s) receive the following things from you?
23. Your personalized attention.
24. Your ongoing encouragement.
25. Your enthusiasm for doing the project.
26. Your willingness to listen to their viewpoints, concerns, etc.
27. Your challenging them to explore their own interests more.
- B. Did your pupil(s) learn the following things from working with you?
28. How to prepare, conduct, and interpret and interview.
29. How to prepare, conduct, and interpret a survey.
30. How to self-direct their own learning pursuits.
31. How to pose questions they would later answer.
32. How to think at higher levels (e.g., analysis, synthesis, evaluation).
33. How to work cooperatively with others (especially with group members if yours was a group project).
34. How to listen to other people's viewpoints.
35. How to prepare a final product, report, display, etc. of what was done and learned.
36. How to present to classmates the final product, report, display, etc. prepared above.
- C. What personal, developmental benefits did your pupil(s) gain from working with you?
37. Overcoming shyness.
38. Developing a more positive self-concept?
39. Improved socialization with others.
40. Improved self-discipline.
41. Improved speaking skills.
42. Satisfying his/her own personal interest by doing the enrichment project.
43. Being inspired to continue learning about the project's topic after the formal involvement with you as mentor had ended.
- D. Do you think your pupil(s) would
44. want to do another (different) mentor-directed enrichment project in the future?
45. recommend that their friend do a mentor-directed enrichment project?

Table II. Response Frequencies Obtained from 20 Gifted/Talented ESL Pupils in Grades 6-7 Indicating Benefits They Gained from Doing a "Mentor-Assisted Enrichment Project" (MAEP) with a Preservice Teacher Who Served as a Mentor

Response Options:

	(-1)	(-2)	(-3)	(-4)	(-5)
Not Applicable					
Definitely "No"					
Somewhat "No"					
Neutral					
Somewhat "Yes"					
Definitely "Yes"					

Response Frequencies

-	-	1	-	14	3
-	-	-	3	9	8
-	1	1	6	9	3
-	1	3	3	10	3
-	1	1	2	5	11
-	2	2	2	3	11
-	-	2	4	5	9
-	2	2	6	6	4
-	-	5	3	5	7
-	-	5	-	7	8
-	-	2	2	5	11
2	2	1	5	9	1
-	-	-	3	10	7
-	2	1	3	7	7
2	-	1	-	4	13
-	4	3	4	8	1
-	3	1	7	7	2
20	-	-	-	-	-
-	1	1	3	7	8
-	-	-	4	8	8
-	-	-	-	6	14
-	-	1	2	8	9
20	-	-	-	-	-
-	-	2	-	7	11
20	-	-	-	-	-
-	-	-	-	6	14
-	1	3	3	6	7
2	1	3	2	4	8
9	-	4	3	3	1
-	1	1	4	9	5

DIRECTIONS: You have just finished doing an enrichment project with a mentor. Now, we want to find out your reactions to working with a mentor. Please answer EVERY question below. Circle the answer that is most true for each question. Leave any items blank that you do not want to answer. You will not be penalized for doing this. Your completion of this questionnaire indicates your personal consent to do this. Thank you.

1. Circle one answer for each question below.

- Did you become more interested in the topic as you worked on it?
- Did your mentor incorporate your interest into the topic of the project?
- Did you learn to be properly prepared for each meeting with your mentor?
- Did your project follow a carefully sequenced series of learning activities?
- Did your mentor provide enough direction without telling you what to do or think?
- Did your mentor arrange active kinds of learning experiences for you to do?
- Did your mentor make good use of your interest each week?
- Did you learn how to think at the higher levels to answer questions as you did your project?
- Did your mentor provide motivation at the right time to keep you working according to your schedule or plan?
- Did your mentor employ teaching methods and experiences that were appropriate for what you were doing?
- Did your mentor use interesting resources and materials that kept you motivated to want to learn about the topic?
- Did you know what kind of thinking skills your mentor emphasized at each meeting? (e.g. critical thinking, problem-solving, higher level thinking skills)
- Was what you did at each meeting valuable to you?
- Did you develop new skills and behaviors in your own personal style rather than just copy your mentor?
- If you worked with a partner, did you learn how to share responsibilities?
- On your own, could you have arranged the fieldtrips and interviews your mentor arranged?
- As a result of working with your mentor, do you now know what kinds of enrichment activities you need to do to satisfy your interests in a topic?
- (This question asked of mentors but not of pupils.)
- Would you want to do another enrichment project with a mentor?
- Do you feel that your mentor was really committed to working with you on this project?
- Was your mentor knowledgeable about the topic you worked on together?
- Were you suitably matched with your mentor?
- (Question asked of mentors but not of pupils.)
- Did your mentor provide you with encouragement throughout the project?
- (Question asked of mentors but not of pupils.)
- Did your mentor allow you to give input and ideas on the direction of the project?
- Did your mentor challenge you to pursue your own interests to a greater depth?
- Did your mentor instruct you in the techniques required to prepare, conduct, and interpret an interview?
- Did your mentor instruct you in the techniques required to prepare, conduct and interpret a survey?
- Did you do the majority of the work on the project (rather than your mentor doing most of the work)?

Table II continued

Response Options:

	(=1)	(=2)	(=3)	(=4)	(=5)
Not Applicable					
Definitely "No"					
Somewhat "No"					
Neutral					
Somewhat "Yes"					
Definitely "Yes"					

Response
Frequencies

1	2	1	4	2	10
2	1	1	5	10	1
2	-	1	1	8	8
3	-	-	2	9	4
1	-	-	1	4	14
1	-	-	3	3	13
-	-	-	-	14	6
-	-	1	2	11	6
20	-	-	-	-	-
20	-	-	-	-	-
1	-	1	2	11	6
20	-	-	-	-	-
-	-	2	7	5	6
-	1	1	2	8	8
-	-	2	2	5	11
-	-	3	10	5	2
-	-	1	2	8	9
-	-	-	2	11	7
-	-	-	4	8	8
-	-	2	1	8	9
-	-	-	-	6	14
-	1	-	2	6	11
-	-	3	4	10	3
-	1	1	4	9	5
-	-	-	1	4	15
-	-	-	1	9	10
-	-	-	2	11	7
-	-	3	4	6	7

31. Did your mentor help you to learn to formulate questions which could be answered through the research you conducted in your project?
32. Did your mentor help you to utilize the higher level thinking skills? (e.g., analysis, synthesis, evaluation)
33. Did your mentor help you to learn cooperation in a group project?
34. Did your mentor emphasize the need to defer judgement and listen respectfully to other people's views?
35. Did your mentor help you in the preparation of your final product?
36. Did your mentor get you ready to present your project to your classmates?
37. Do you think that you have become more self-confident as a result of working with a mentor?
38. Do you think you are less shy as a result of working with a mentor?
39. (Question asked of mentors but not of pupils.)
40. (Question asked of mentors but not of pupils.)
41. Do you think your speaking skills have improved as a result of working with your mentor?
42. (Question asked of mentors, but not of pupils.)
43. Were you inspired to continue learning about the project's topic after the project ended?
44. Would you like to work with another mentor on another enrichment project?
45. Would you recommend working with a mentor to your friends?
46. After working with a mentor, do you now know how to do an enrichment project on your own?
47. Was your mentor well-prepared for each meeting?
48. Was your mentor able to describe specifically the nature of the mentor project, at your first meeting?
49. Were you interested in doing the topic proposed in your first meeting with the mentor?
50. Did your interest in the topic increase as the project continued?
51. Did your mentor allow you to give input and ideas on the direction of the project?
52. Did you and your mentor agree jointly on all the aspects of your project plan?
53. Did you understand precisely what you were expected to accomplish in this project?
54. Did you do the majority of the work on the project (rather than your mentor doing most of the work)?
55. Do you think it is important for you to finish your enrichment project?
56. Do you think it is important for you to present your enrichment project to your classmates?
57. Did you put forth your best effort while doing your enrichment project?
58. Out of all the other projects you have done at school, do you like this project best?

Table III. A Summary Table Comparing Means, Standard Deviations, and F Values for Common Questions Answered by 11 Mentors and 20 Students **

Question #	Mentors			Students			F Value	2-Tail Prob.
	n	Mean	S.D.	n	Mean	S.D.		
1.	11	4.636	0.505	20	4.150	0.671	1.77	0.357
2.	11	4.272	0.905	20	4.250	0.716	1.59	0.366
3.	11	4.454	0.688	20	3.600	0.995	2.09	0.232
4.	11	4.636	0.924	20	3.55	1.099	1.41	0.585
5.	11	4.090	0.831	19	4.368	0.895	1.16	0.838
6.	11	4.636	0.505	20	3.950	1.432	8.05	0.002*
7.	11	4.181	0.751	20	4.050	1.050	1.96	0.277
8.	11	4.000	0.632	18	3.666	0.970	2.35	0.171
9.	7	4.571	0.787	20	3.700	1.218	2.40	0.283
10.	11	4.636	0.505	20	3.900	1.210	5.75	0.007*
11.	11	4.818	0.405	20	4.250	1.020	6.35	0.005*
12.	11	4.181	0.874	18	3.333	1.085	1.54	0.492
13.	11	4.272	0.467	20	4.200	0.696	2.22	0.197
14.	11	4.090	0.831	20	3.800	1.281	2.38	0.162
15.	9	4.666	0.500	18	4.611	0.778	2.42	0.206
16.	11	4.636	0.674	20	2.950	1.276	3.58	0.043*
17.	11	4.181	1.079	20	3.200	1.196	1.23	0.759
19.	11	4.272	0.905	20	4.000	1.124	1.54	0.487
20.	11	4.727	0.647	20	4.200	0.768	1.41	0.589
21.	11	4.818	0.405	20	4.700	0.470	1.35	0.640
22.	11	3.454	1.572	20	4.250	0.851	3.42	0.020*
24.	11	4.818	0.405	20	4.350	0.933	5.32	0.010*
26.	11	4.909	0.302	20	4.700	0.470	2.43	0.151
27.	11	4.454	0.522	20	3.750	1.251	5.74	0.007*
28.	8	4.125	0.641	18	3.833	1.339	4.37	0.055
29.	1	4.000	0.0	11	3.090	1.044	0.0	1.000
30.	11	3.818	0.874	20	3.800	1.056	1.46	0.547
31.	11	4.000	0.632	19	3.894	1.410	4.97	0.013*
32.	11	4.181	0.603	18	3.500	0.924	2.35	0.172
33.	10	4.600	0.516	18	4.277	0.826	2.56	0.153
34.	11	4.727	0.467	15	4.133	0.640	1.88	0.320
35.	11	4.727	0.467	19	4.684	0.582	1.55	0.481
36.	11	4.727	0.467	19	4.526	0.772	2.73	0.108
37.	11	4.090	0.701	20	4.300	0.470	2.22	0.129
38.	10	3.500	0.972	20	4.100	0.788	1.52	0.422
41.	11	3.636	0.674	19	3.947	0.780	1.34	0.652
43.	10	4.300	1.059	20	3.750	1.020	1.08	0.841
44.	11	4.545	0.688	20	4.050	1.099	2.56	0.131
45.	11	4.545	0.688	20	4.250	1.020	2.20	0.202

* indicates $p < .05$

** (Actual questions can be found in Tables I and II. Questions 18, 23, 25, 39, 40 and 42 are excluded because only the mentors answered these questions. Mentors and students answering "Not Applicable" to any question are excluded from the analysis for that question.)

during interviews conducted after the MAEPS had been completed.

During the interviews, pupils also expressed two primary reasons that explain the statistically significant differences obtained for questions 6/10/11 and for questions 22/24/27/31. Concerning the first set of questions, Pupils said that they expected and wanted their mentors to provide learning experiences and resources--and use teaching methods-- which would enable them to become more actively involved throughout the project, beginning with planning stage.

Concerning the second set of questions, some pupils said that their mentors failed to provide adequate on-going encouragement, did not challenge them to pursue their own interests during the project, and did not help them to formulate their own questions to be answered during the project. These mentor failures caused those pupils, who were affected, to perceive their mentors in a generally negative way.

In contrast, these particular mentors gave generally positive responses to questions 24/27/31/22 because they believed they were doing an adequate job.

4. Future Directions

In order to clarify the questionnaire responses and obtain additional information pertinent to the future implementation of "Mentor-Assisted Enrichment Projects", interviews were conducted with mentors, pupils, and the enrichment teacher after the MAEPS had been presented.

Mentors said that they need to be taught how to (1) "read" pupil reactions in order to know if pupils are benefitting from

doing the project, (2) encourage pupils to contribute more readily to planning the project, and (3) assure pupils and their parents that fieldtrips outside of the "Chinatown" community are not frightening, but are beneficial and enjoyable. Accordingly, next year, a "cultural unit" on how to work with our Oriental ESL pupils will be included as an important part of the mentor's training. This unit will also deal with topics such as parental expectations for academic excellence at the expense of personal enjoyment, and pupil attitudes towards risking failure as they venture into the unknown.

To inform next year's mentors and pupils about what a MAEP entails from beginning to the final class presentation, they will be shown videotapes of pupils describing their completed projects to classmates and to the authors during taped interviews. The end-products made by previous pupils will be displayed to provide additional visual examples. Further communication will occur via the "grapevine" as pupils tell their friends what they did and learned while working with a mentor .

Because most pupils reported nervousness over giving their class presentations, mentors will be instructed to assist their pupils to rehearse before small groups of 4-6 pupils and to view videotaped playbacks of these rehearsals instead of simply rehearsing before one's mentor as was done in 1981-82.

Doug Hill, the enrichment teacher is planning to show parents videotaped examples of pupils giving class presentations as well as examples of other completed MAEPs so that parents will encourage their children to go on fieldtrips and then present to classmates what they did and learned.

Next year, greater emphasis will be stressed by the authors and the enrichment teacher on what "gifted/talented" means in the school context where mentors will work because many mentors mistakenly geared their input to the top 1-3% when they were more often working with the top 10-20% of pupils in order to promote our objective of not excluding pupils on the basis of some arbitrarily high IQ score. In fact, we believe that the guidelines provided in the "Four-Phase Enrichment Model" can enable a preservice teacher to mentor any pupil, who is motivated to do a MAEP in an area of personal interest.

4. A Concluding Caution: Support Is Required!

Although "Mentor-Assisted Enrichment Projects" have proven beneficial to both pupils and mentors, some concluding cautions shall be presented to dispel any misconceptions about this scheme being easy to implement, for such is not the case.

The enrichment teacher must be prepared to obtain cooperation from all the regular classroom teachers whose gifted and talented pupils are going to work with a mentor because sometimes the pupils will have to be excused from their regular classrooms in order to meet mentors at a time that fits their mentor's university schedule of courses.

The principal's support is essential in handling public relations with parents, including communicating the advantages of working with a mentor and obtaining parental permission for unusual fieldtrips (e.g. one of our mentors took his pupil flying). Principals also help obtain money for the materials (e.g. slide film, poster paper) that will be used to give multi-

media class presentations illustrating places visited on fieldtrips, and things seen and learned.

The enrichment teacher and the mentors must be prepared to spend additional time at school or on the telephone at home resolving unforeseen problems and obtaining resource materials needed to complete and present a quality enrichment project .

The college or university instructor must be willing to spend time helping prospective mentors to prepare an initial proposal and then to revise it into a manageable 8-10 week plan of appropriately-sequenced, interesting enrichment activities which not only maintain pupils' interest but which also challenge them to answer their own questions while utilizing their higher level thinking skills. This instructor must give feedback on the mentor's Weekly Reports and work harmoniously with the enrichment teacher in supporting each other's supervision of the mentors , in handling unexpected problems, and in making necessary changes (over the telephone at night, in meetings after school, or on weekends).

Are "Mentor-Assisted Enrichment Projects" really worth this much time and effort? We think so based on our success thus far.

Our goal has been to provide low-cost enrichment experiences for interested pupils , which benefit those pupils and their classmates as well as our preservice teachers . Four years of experience with Anglophone pupils and one year with ESL pupils has provided evidence that we are accomplishing our goal, thanks to the discretionary grant from ERIBC which made this study possible.

References

- Gray, W.A. Provide enrichment experiences for your gifted students. The B.C. Teacher, May-June, 1982, pp. 171-173.
- Gray, W.A. and Gray, M.E. An enrichment model for gifted/talented ESL pupils. (Three-hour multi-media workshop presented at the 1982 TESOL Conference in Honolulu, Hawaii.)
- Gray, W.A. and Rogers, D. Mentor-Directed Enrichment Projects for gifted elementary school pupils: Rationale, guidelines, benefits. Special Education in Canada, Vol. 56, No. 2, 1982, pp. 24-31.
- Renzulli, J.S. The Enrichment Triad: A guide for developing defensible programs for the gifted and talented. Mansfield Center, Connecticut: Creative Learning Press, Inc., 1977.